## U.S. Patent Application Serial No. 09/023,416

tubing,

each of the on-off devices being of the type selected from the group including a 2-type on-off device having a two-port valve, a 2-3-type on-off device having a two-port valve and a three-port valve, a 2-3-3-type on-off device having a two-port valve and two three-port valves, a 3-3-type on-off device having two three-port valves, and a 3-3-3-type on-off device having three three-port valves,

main bodies of two-port valves of all types of on-off devices being identical in configuration and each having an inlet port and an outlet port in a bottom face thereof, and main bodies of three-port valves of all types of on-off devices being identical in configuration and each being formed in a bottom face thereof with an inlet port, an outlet port always in communication with the inlet port, and an inlet-outlet subopening having a port separate from said inlet port and said outlet port;

each port of said two-port valves and said three-port valves being arranged in a row disposed in a common plane along said each line; and

valve mounts mounting said valve main bodies including a plurality of joint members having upper surfaces disposed in substantial coplanar relation, said joint members containing internal passages communicating with ports of said valves and operatively interconnecting said valves and said fluid controllers in selected fluid flow relation.